4009-9807 NAC Option Card Installation Instructions

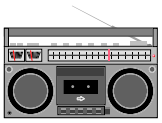
Cautions and Warnings

DO NOT INSTALL ANY SIMPLEX PRODUCT THAT APPEARS DAMAGED. Upon unpacking your Simplex product, inspect the contents of the carton for shipping damage. If damage is apparent, immediately file a claim with the carrier and notify Simplex.

ELECTRICAL HAZARD - Disconnect electrical power when making any internal adjustments or repairs. Servicing should be performed by qualified Simplex Representatives.

STATIC HAZARD - Static electricity can damage components. Therefore, handle as follows:

1. Ground yourself before opening or installing components (use the 553-484 Static Control Kit).
2. Keep uninstalled component wrapped in anti-static material at all times.



RADIO FREQUENCY ENERGY - This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Overview

This publication shows how to install the 4009-9807 NAC Option Card (Part No. 565-828) into a 4009 IDNet™ NAC Extender (4009 IDNet). The NAC option card provides the 4009 IDNet Extender with four additional NAC circuits.

Refer to the *4009 IDNet™ NAC Installation Instructions (574-181)* for configuration information. Refer to the 842-068 Field Wiring Diagram for additional wiring information.

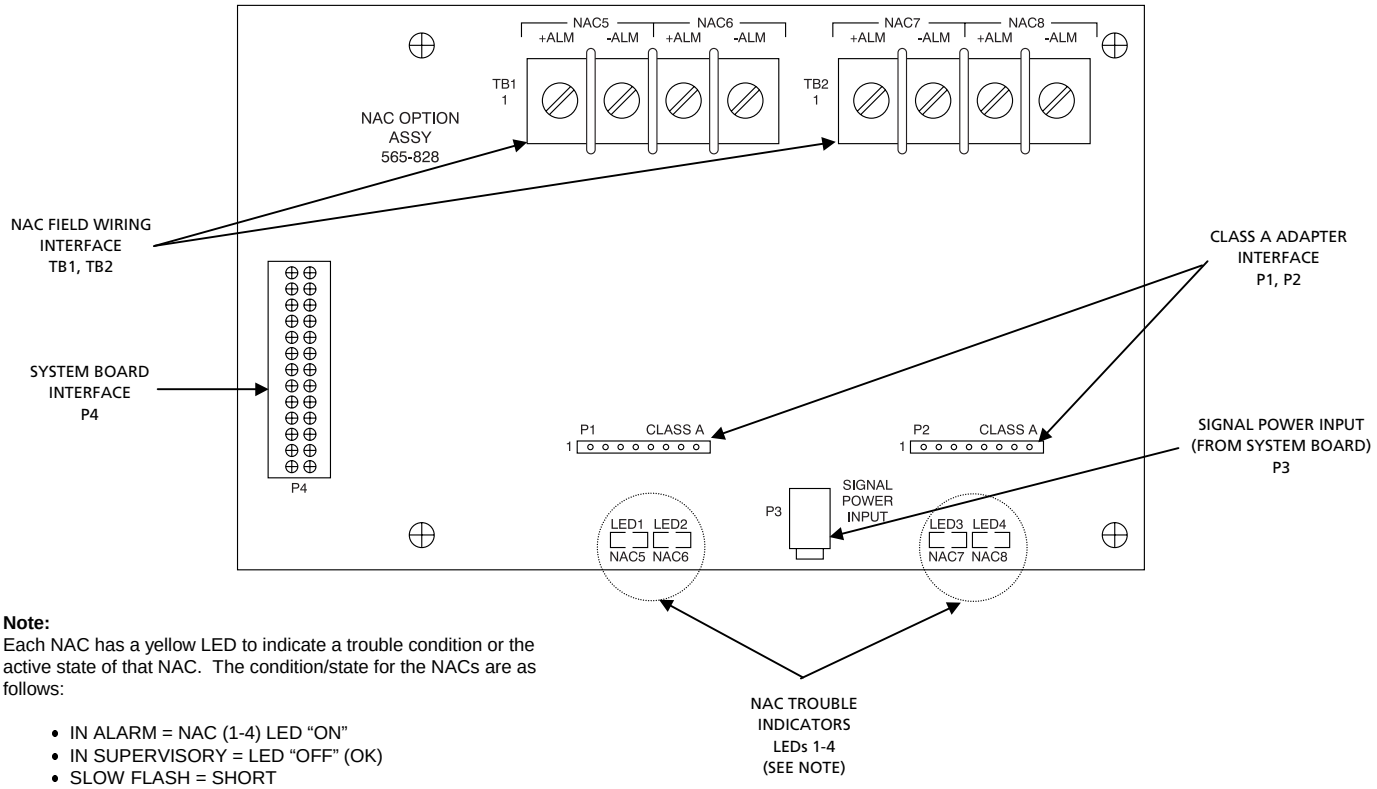
In this Publication

This publication discusses the following topics:

NAC Option Card

In addition to the four NACs found on the 4009 System Board, an aftermarket NAC option card is available to provide four additional Class B (Style Y) hardwired NACs. To support Class A (Style Z), you must install a Class A adapter option card that mounts onto the NAC option card (*Refer to the 4009-9808 Class A Adapter Option Card Installation Instructions [574-326]).* Each 4009-9807 NAC option card supports up to two Class A option card(s).

Figure 1 illustrates the location of the NAC option card plug connector interfaces and the two terminal blocks that support the additional four NACs.



Note:
Each NAC has a yellow LED to indicate a trouble condition or the active state of that NAC. The condition/state for the NACs are as follows:

- IN ALARM = NAC (1-4) LED “ON”
- IN SUPERVISORY = LED “OFF” (OK)
- SLOW FLASH = SHORT
- FAST FLASH = OPEN CIRCUIT

Figure 1. 4009-9807 NAC Option Card

Wiring

NAC Option Card Wiring

Use the information in Figure 2 to terminate all Class B and Class A wiring. Refer to the 842-068 Field Wiring Diagram for complete wiring, compatible appliances, current, and line distance information. Maximum current for each circuit is 1.5 Amps. All wiring to be 18AWG minimum to local code, supervised, and Power-Limited.

Class B Wiring

Class B (Style Y) wiring on the option card's four NAC circuits are connected to the terminal strips (TB1, TB2) at the top edge of the NAC option card. The NAC circuits (NAC5 - NAC8) are supervised with a 10K End-of-Line (EOL) resistor. Install a 10KΩ, 1/2W (Part No. 378-030 - Brown/Black/Orange) EOL resistor from "+" to "-" terminals of the NAC Option Card on each unused circuit.

Class A Wiring

Class A (Style Z) NAC operation is achieved by installing the 4009-9808 Class A Adapter Option Card. The Class A wiring is terminated at terminal strips (TB1, TB2) at the top edge of the NAC option card. Install a 10KΩ, 1/2W (Part No. 378-030 - Brown/Black/Orange) EOL resistor from "+" to "-" terminals of each Class A NAC in use on the Class A module. Set the Hardware Configuration Switch (SW1) for Class A operation.

- SW1/Position 3 to **"ON"** for Class A Adapter NAC 5 and 6 present.
- SW1/Position 4 to **"ON"** for Class A Adapter NAC 7 and 8 present.

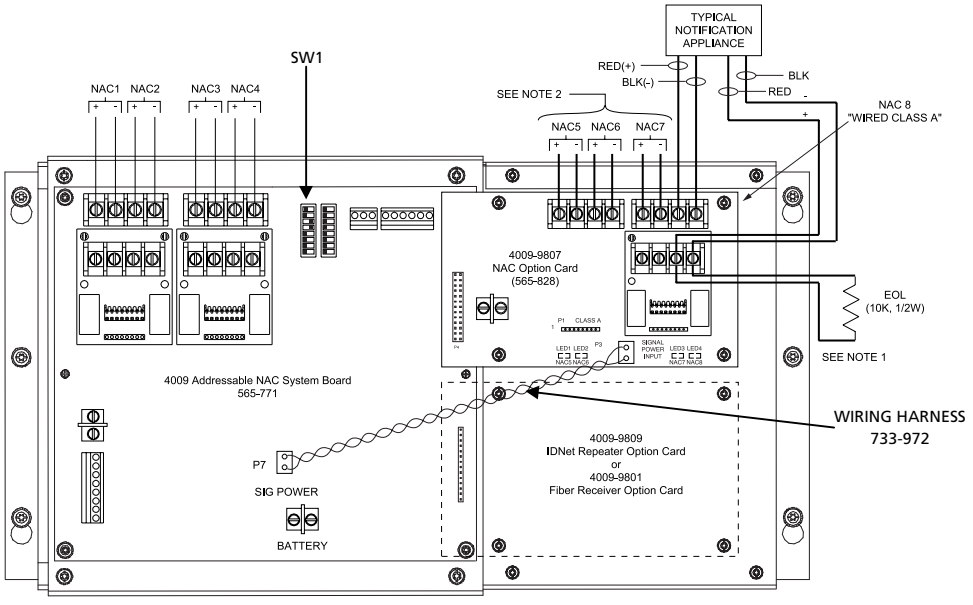


Figure 2. NAC Option Card Wiring

Notes:

1. Install a 10KΩ, 1/2W (Part No. 378-030 - Brown/Black/Orange) EOL resistor from "+" to "-" terminals (TB1) of each Class A NAC in use on the Class A module.
2. Install a 10KΩ, 1/2W (Part No. 378-030 - Brown/Black/Orange) EOL resistor from "+" to "-" terminals (TB1 and/or TB2) of System Board on each unused circuit.
3. All wiring to be 18AWG minimum or to local code.
4. All wiring is supervised and Power-Limited

Module Installation

Mounting the NAC Option Card

Install a 4009-9807 NAC Option Card onto the 4009 IDNet option card plate assembly (636-871) using the following steps and Figure 3.

1. Disconnect battery and then AC power from the 4009 IDNet.
2. Secure the option card plate assembly (636-871) to the 4009 IDNet using four slotted torx screws (supplied).
3. Install the dual row 26-pin header (166-492) into system board connector P4.
4. Line up the back 26-pin connector (P4) of the NAC option card with the 26-pin header installed on the 4009 system board and insert pins into connector.
5. Secure the NAC option card to the plate assembly using four slotted torx screws (supplied).
6. Install the two position signal power harness (733-972) from system board connector (P7) to NAC option card connector (P3).
7. Set the hardware configuration switch (SW1/position 7) located on the system board to **"ON"** to configure the NAC option card.). Refer to the *4009 IDNet NAC Extender Installation Instructions 574-181* for detailed information on setting the hardware configuration switch SW1.

You can now reconnect AC and Battery Power.

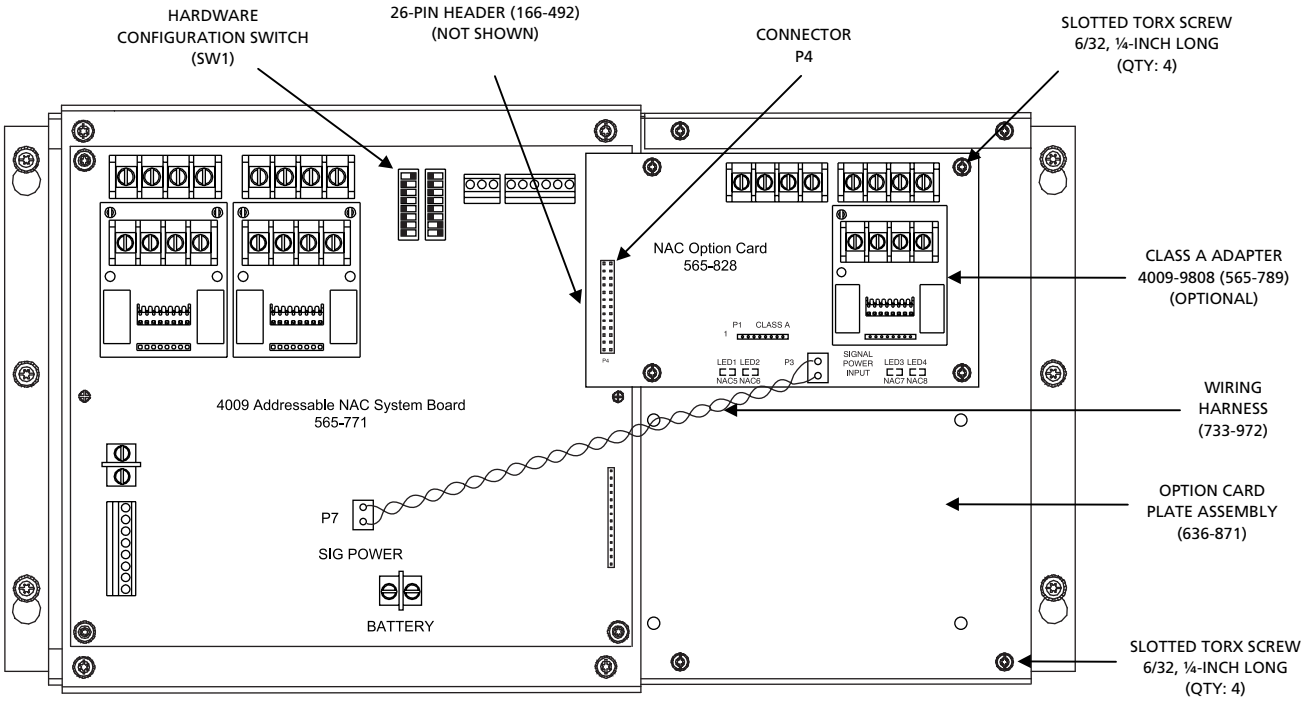


Figure 3. NAC Option Card Installation